

## **Neosho County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 5/24/2016

Using the most recent IMPLAN data available (2014) adjusted for 2016, 19 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Neosho County economy.<sup>1</sup>

These 19 sectors have a total direct output of approximately **\$121.4 million** and support **824.8 jobs** in Neosho County. Running the model for all 19 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Neosho County Economy								
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	Output % of Gross Regional Product		
Direct Effect	824.8	8.99%	\$57,544,757.12	10.00%	\$121,371,794.81	21.09%		
Indirect Effect	107.3	1.17%	\$8,306,410.85	1.44%	\$14,633,286.28	2.54%		
Induced Effect	115.6	1.26%	\$7,017,884.13	1.22%	\$12,683,489.78	2.20%		
Total Effect	1,047.8	11.43%	\$72,869,052.09	12.66%	\$148,688,570.87	25.84%		

As shown in the above table, agriculture, food, and food processing sectors support 1,047.8 jobs, or 11.43% of the entire workforce in the county. These sectors provide a total economic contribution of approximately \$148.7 million, roughly 25.84% of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 19 agriculture, food, and food processing sectors is approximately \$72.9 million, or 12.66% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 12.66% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: <a href="http://www.implan.com/index.php?option=com">http://www.implan.com/index.php?option=com</a> content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **619 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Neosho County.

Top Ten Sectors by Employment					
Sector	Total Employment	Total Output			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	619.0	\$61,670,879.23			
Grain farming	50.8	\$17,256,924.28			
All other crop farming	47.7	\$3,415,821.19			
Wholesale trade	35.9	\$6,338,613.11			
Support activities for agriculture and forestry	29.4	\$3,017,349.75			
Veterinary services	20.2	\$1,641,455.74			
Landscape and horticultural services	20.1	\$1,138,483.50			
Sawmills	16.6	\$4,745,587.57			
Oilseed farming	16.3	\$17,081,646.56			
Animal production, except cattle and poultry and eggs	12.9	\$1,399,174.09			

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$61.7 million** to the Neosho County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Sectors by Output					
Sector	Total Employment	Total Output			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	619.0	\$61,670,879.23			
Grain farming	50.8	\$17,256,924.28			
Oilseed farming	16.3	\$17,081,646.56			
Other animal food manufacturing	6.2	\$8,834,122.63			
Wholesale trade	35.9	\$6,338,613.11			
Sawmills	16.6	\$4,745,587.57			
All other crop farming	47.7	\$3,415,821.19			
Support activities for agriculture and forestry	29.4	\$3,017,349.75			
Owner-occupied dwellings	0.0	\$3,003,551.94			
Veterinary services	20.2	\$1,641,455.74			

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Neosho County economy.

All Agriculture, Food, and Food Processing Sectors				
Sector	Total Employment	Total Output		
Oilseed farming	16.3	\$17,081,646.56		
Grain farming	50.8	\$17,256,924.28		
Vegetable and melon farming	0.4	\$145,221.95		
Fruit farming	0.5	\$72,231.56		
Tree nut farming	0.0	\$5,879.09		
Greenhouse, nursery, and floriculture production	0.5	\$133,313.05		
All other crop farming	47.7	\$3,415,821.19		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	619.0	\$61,670,879.23		
Dairy cattle and milk production	2.7	\$1,493,049.98		
Poultry and egg production	0.6	\$652,447.58		
Animal production, except cattle and poultry and eggs	12.9	\$1,399,174.09		
Commercial logging	1.1	\$59,018.20		
Other animal food manufacturing	6.2	\$8,834,122.63		
Animal, except poultry, slaughtering	1.2	\$743,717.21		
Bread and bakery product, except frozen, manufacturing	7.4	\$817,427.30		
Frozen cakes and other pastries manufacturing	0.5	\$65,394.09		
Sawmills	16.6	\$4,745,587.57		
Veterinary services	20.2	\$1,641,455.74		
Landscape and horticultural services	20.1	\$1,138,483.50		

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Neosho County, the retail sector was omitted.